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## THE SUBVERSIVE CHALLENGES OF MULTIMORBIDITY

*When troubles come  
they come not single spies but in battalions*

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The literature on multimorbidity has expanded hugely in recent years, reflecting its importance as a major challenge facing health care systems in developed countries. The nature of this challenge has been underestimated.

Epidemiology often reveals important insights by applying crude definitions and measurements to large numbers of people so that they can be studied in groups. A common approach is to define multimorbidity in terms of having two or more conditions. A landmark paper which used this approach showed multimorbidity increasing with age with an onset 10-15 years earlier in socio-economically deprived areas (1). In this Scottish population, while prevalence rose with age, the demographic shape of the population determined that most people with multimorbidity were under 65.

Such observations are useful but in clinical practice a definition based on two or more conditions can be trivial. The commonest co-morbidity in elderly people is hypertension, so that only one other condition is required to meet the definition of multimorbidity. This case definition offers little new challenge to clinicians or to services.

On the other hand, the commonest co-morbidity in deprived areas is a mental health problem (1), whose combination with another condition is likely to complicate the care that patients need and receive.

More demanding case definitions, such as 5 or more conditions, or the combination of a physical and psychological health problem, include smaller numbers of patients, demonstrate steeper social gradients and present a significantly greater challenge (2).

Even so, many patients with multiple conditions are not “complex”, while some patients with single conditions are very “complex”. Such distinctions draw on a wider body of knowledge concerning not only the individual but also their circumstances.

A more comprehensive definition of multimorbidity is the number, severity and complexity of health and social problems which exists within families or households, but such information is seldom written down or recorded.

In the Care Plus Study, involving a randomised controlled trial of increased consultation time with a general practitioner for patients “with complex problems” in deprived areas, it was impossible to agree on an operational definition of “complexity” (3). Subjecting patients to a questionnaire, assessing their situation in order to determine whether they were complex, was neither feasible nor desirable.

The trial proceeded on the pragmatic basis that a patient was “complex” if the general practitioner, drawing on his or her knowledge of the patient, considered that the patient was complex. Subsequently, when the trial had started and the study participants had been selected and then characterised, there was no question concerning their complexity, the patients having 5 conditions on average, most with a combination of physical and mental health conditions. Defining multimorbidity was not the starting point.

While most patients with multimorbidity are different from each other, (4) their needs are often the same, comprising unconditional, personalised, continuity of care. Specialist expertise and inputs may be required for diagnoses and treatments at particular stages of the patient journey, but the support that patients need for their journey as a whole is most likely to be generalist and local in nature, building on cumulative knowledge and experience.

The metaphor of a journey introduces the concept of destination, and the criteria by which the journey may be considered a success. Whereas formerly medical students were taught, *“Listen to the patient, he is telling you the diagnosis,”* in the future they will *“Listen to the patient, she is telling you her treatment goals”*.

In his 2014 RCGP Mackenzie Lecture, Professor Jan De Maeseneer from Ghent in Belgium described the familiar picture of an elderly patient with multiple diagnoses and medications, each encounter being dominated by a plethora of clinical targets (5). Neither the patient nor the doctor were satisfied by these arrangements. Only when the doctor sat down with the patient to establish her treatment goals, which were a combination of function (self care and mobility) and social participation (weekly trips to go shopping and play cards), did they “turn a corner” and work more effectively and satisfactorily together.

George Bernard Shaw described all professions as conspiracies against the laity (6), not because they meet in secret to conspire against patients, but because of their tendency and ability to configure arrangements in ways that suit them. *“It is true that the personal ambitions and professional satisfactions of doctors overlap with the needs of patients, but they do not coincide; yet this is the assumption of a great part of medical education (7).”*

The last decade in the UK National Health Service has seen a substantial increase in specialist services and manpower in both secondary and primary care while generalist medical manpower, mostly in general practice, has increased by much less, if at all (8).

Specialist services are typically exclusive, with referral criteria, waiting lists to control demand, evidence-based protocols to deliver and discharge back to general practice when they are done. Such care may reach a high standard when assessed internally but leaves a lot for general practice to do, in helping patients who do not meet the referral criteria, are not good at accessing unfamiliar services, who have other morbidities or who are not made better by the treatments on offer.

Evidence-based medicine is perversely a monument to bias, based on the exclusion of complicated patients with multimorbidity. In the Scottish study mentioned previously, patients with each of the 40 most common chronic conditions and no other were always a minority(1). Most patients with each condition had two or more conditions. Yet in most randomised controlled trials, multimorbidity is an exclusion criterion. In a study of the continuing professional development needs of general practitioners working in deprived areas, a generic educational need concerned how to apply evidence based on studies carried out in other kinds of place on different kinds of patient (9).

Epidemiologists, health services researchers and clinical trialists are often content with 70% response rates, but general practice has no such luxury. Its task is to provide care for everyone. When generalist care in the community is weak, so that conditions are not ameliorated and their complications are not prevented, postponed or lessened, patients present for emergency care earlier than they should with huge implications for the expense and sustainability of such services (10).

The “treatment burden” comprises the work that patients must do to live successfully, understanding their conditions and medications, accessing services and adapting their life and work accordingly(11). The concepts of self-care and self-management imply the transfer of responsibility and agency from professionals to patients, and have varied applicability, depending on where patients are placed on the spectrum from “worried well” to “unworried unwell”. In deprived areas, such concepts are destinations rather than starting points. The treatment burden is increased and life is made more difficult for patients having to access advice and support from multiple sources. Such patients need a “worried doctor” to steer their course, to facilitate access and to anticipate hazards (12).

The comedian Spike Milligan described the invention of a machine that did the work of two men, but required three men to work it (13). No health care system can afford such

arrangements but, with the expansion of specialist services, this is the direction of travel. Extending the metaphor, the only affordable and sustainable future involves machines that do the work of two people, but which can be operated by one person. Translated into practical terms, this involves small teams of health professionals working unconditionally and consistently with patients they know.

In life, as in the film, little happens in *Brief Encounters*. It is the serial encounter that matters, comprising all the contacts a patient has, some of which may be short and impersonal, but the most important of which involve long term direction and common purpose, building patients' knowledge and confidence in living with their conditions and in accessing appropriate advice and support. Local health systems require not only this continuity and purpose but also the flexibility to accommodate starts, stops, re-starts, diversions, events, successes and disappointments (14).

Multimorbidity is not a new problem to be addressed in old ways but a huge challenge to existing institutions, professional authority and ways of working. The knowledge and expertise produced by medical schools, mainly supporting the specialist paradigm, is not the type of knowledge or expertise needed to address complex multimorbidity, or the clinical leadership needed to develop local health systems. The dominant paradigm breaks problems down to their component parts. The new paradigm is about building, whether patient narratives or the relationships required to develop sustainable local health systems based on productive working across boundaries.

In his essay on the training of professionals, AN Whitehead saw the danger ahead (15), *"The leading intellects lack balance. They see this set of circumstances, or that set; but not both sets together. The task of co-ordination is left to those who lack either the force or the character to succeed in some definite career. In short, the specialised functions of the community are performed better and more progressively, but the generalised function lacks vision. The progressiveness in detail only adds to the danger produced by the feebleness of coordination. We are left with no expansion of wisdom and with greater need for it."*

The specialist and reductionist paradigms will survive, but need to be complemented by delivery and support systems which are similarly resourced, community-based and generalist in nature.

(1552 words)

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